

IN THE UNITED STATES DISTRICT COURT FOR THE  
WESTERN DISTRICT OF OKLAHOMA

MISTY RALEY, et al.,	)	
	)	
Plaintiff,	)	
vs.	)	NO. CIV-08-0376-HE
	)	
HYUNDAI MOTOR COMPANY,	)	
ET AL.,	)	
	)	
Defendants.	)	

**ORDER**

The court previously addressed defendants' Daubert<sup>1</sup> challenges to some but not all of plaintiff's proposed experts. Order, January 14, 2010 [Doc. #116]. This order addresses the remaining experts who are challenged on the basis of Daubert and Fed.R.Evid. 702 — Stephen A. Batzer, William H. Muzzy III, and Donald Friedman.<sup>2</sup>

The parties' submissions as to Dr. Batzer are sufficient to permit the court to resolve the Daubert objections to his testimony without a hearing. As to Mr. Muzzy and Mr. Friedman, the court conducted a hearing on January 28, February 3, February 5, and February 10, 2010.

The standards applicable to a Daubert challenge were stated fully in the court's January 14 order and will not be repeated here.

---

<sup>1</sup>*Daubert v. Merrill Dow Pharm. Inc.*, 509 U.S. 579 (1993). See also Fed.R.Evid. 702, which now substantially incorporates the principles of Daubert.

<sup>2</sup>The motion as to Mr. Friedman seeks to exclude any testimony by him or others based on the "Jordan Rollover System" and M 216 tests.

Stephen A. Batzer

Stephen A. Batzer is affiliated with The Engineering Institute. He has a Ph.D. in Mechanical Engineering-Engineering Mechanics and has substantial professional experience in various issues as to automotive crash-worthiness. He has concentrated study in the areas of glazing and roof strength. Plaintiffs offer him as an expert on glass and glazing and the design features which impact that.

The opinions which plaintiff seeks to offer through Dr. Batzer appear to be essentially these:<sup>3</sup> (1) that this accident occurred in a particular fashion (i.e. passenger side leading rollover, etc.), (2) that a rollover like this one (i.e. no collision with another vehicle or fixed object) is “highly survivable” if the vehicle is crashworthy, (3) that Ms. Raley was “likely initially belted” at the onset of the accident, (4) that the 1999 Sonata was defectively designed in that it lacked an effective rollover protection system, due to a deficient roof structure and the absence of “occupant retention side glazing”, (5) that a stronger roof structure would likely have prevented the fracture of the tempered side glass, (6) that the windows were up at the time of the crash, the glass contained no manufacturing defects and performed as designed, (7) that a purpose of the federal glazing standard (FMVSS-205) and of design standards is to minimize the possibility of occupant ejection during a rollover, (8) that laminated glazing in the side windows, like that used in windshields, would have “acted as a proper secondary restraining feature” for this vehicle, (9) that such glazing was

---

<sup>3</sup>*Investigative Report and Supplemental Report, both dated September 14, 2009, exhibits 2 and 4 to Doc. #88.*

economically and technologically feasible in 1999, (10) that installation of such glazing would cost approximately \$96 to \$159 per vehicle, (11) that NHTSA's 2001 conclusion as to the risks of laminated side glazing are wrong, (12) that laminated glass has other benefits, and (13) that Hyundai acted irresponsibly in selling its vehicles without fully researching the issues involved in side window glazing. The deposition excerpts and declarations attached to the briefs of the parties suggest other issues as well.

Defendants concede Dr. Batzer's qualifications in the area of automotive glass and glazing.<sup>4</sup> Further, while challenging the basis for various of Dr. Batzer's conclusions in these and other areas, defendants do not appear to dispute his general qualifications in the area of roof crush analysis at least as it relates to the interplay between roof crush and the glazing system. They do seek to limit his testimony solely to glazing issues, on the basis that he is offered only for that purpose and his only opinions reached "to a reasonable degree of engineering certainty" are those involving glazing. The court does not view Dr. Batzer's proffered testimony, or the basis for it, so narrowly. His expertise and proffered opinions extend not only to desirability of laminated glass in side windows, but also to the interplay between the window design and the surrounding support structures. The court concludes Dr. Batzer is qualified to offer opinions in the area of automotive glass and glazing, the impact of roof structure on the glazing system, and related crashworthiness determinations.

Certain of the opinions which Batzer may offer, or at least which defendants think he

---

<sup>4</sup>*Defendants do not challenge the qualifications of any of the experts challenged in these Daubert motions.*

may offer, are outside the scope of his expertise, at least as reflected by the present submissions. Defendants suggest Dr. Batzer may seek to testify (or offer a slide show including) that the Sonata's seat belts, door latches, or other components unrelated to glazing were defective. No basis for any such testimony has been shown and it will not be permitted from this witness.

The remaining objections of defendants are essentially that Dr. Batzer lacked a sufficiently reliable basis for certain of his conclusions, noting that he did not personally inspect the vehicle involved here or do testing specific to that vehicle. It seems clear enough that, as to the central issues relating to the desirability of laminated glass versus tempered glass, Dr. Batzer's opinions are based on his view of the general characteristics of the two types of glass and are not tied to any particular model or car. The absence of vehicle-specific testing is therefore not a basis for excluding the opinions. As to this and most other of defendants' objections, the court concludes the objections go to the weight to be given to Dr. Batzer's testimony rather than its admissibility.

Certain of defendants' objections do, however, have merit and Dr. Batzer's testimony will be limited accordingly. His proffered opinion (#1 above) as to how the crash happened appears to be based on the opinions of other experts, rather than any independent testing or reconstruction of the accident by him. Although he is entitled to make assumptions based on the findings of other experts, he is not entitled to suggest those opinions are his own absent further work or expertise brought to bear by him. See Champagne Metals v. Ken-Mac

Metals, Inc., 458 F.3d 1073 (10th Cir. 2006). To the extent he seeks to offer his opinion as to precisely how this accident occurred (as opposed to making assumptions about it), a sufficient showing has not been made. Similarly, he will be precluded from offering any opinion as to whether Ms. Raley was or was not wearing her seatbelt (#3 above). His basis for that conclusion is indicated to be the testimony of Ms. Raley and her children, as opposed to any scientific method or principle of engineering. The jury is capable of deciding for itself whether to believe the testimony of Ms. Raley and her children.

Defendants object to any opinion by Dr. Batzer as to what defendants' reason for using tempered glass was or what impact cost may have had on its decision. The court concludes Dr. Batzer will not be permitted to opine as to defendants' motivation or reasons for adopting the particular design. Expert testimony is ordinarily inappropriate as to a party's motivation, DePaepe v. General Motors Corp., 141 F.3d 715, 720 (7th Cir. 1998) and, in any event, Dr. Batzer has done no investigation that would enable him to reach an expert opinion in this regard even if it was otherwise proper.<sup>5</sup> Similarly, Dr. Batzer will be precluded from offering any opinion that defendants were irresponsible in offering the 1999 Sonata without doing more research as to window glazing (#13 above). His basis for that conclusion is the testimony of a Hyundai official (who, according to Dr. Batzer, lacked a "mature knowledge" of the area) in some other lawsuit, with whom he disagrees. While Dr. Batzer may certainly

---

<sup>5</sup>*This does not preclude Dr. Batzer from offering an opinion, if otherwise supported, as to his estimate of the additional cost of laminated glass generally (#10 above). However, he has no reliable basis for suggesting that defendants knew a particular modification would have carried a particular cost or that cost was the factor that drove defendants' decision.*

disagree with Mr. Cho or his conclusions, his analysis of Mr. Cho's testimony is an insufficient basis to warrant a conclusion that defendants' research was inadequate.

As with plaintiff's other experts, Dr. Batzer will not be permitted to offer opinions which are essentially legal conclusions. For example,<sup>6</sup> he will not be permitted to testify that defendants' use of tempered glass in the 1999 Sonata constituted "negligence." His declaration/brief,<sup>7</sup> submitted in opposition to defendants' motion, includes a rather remarkable passage as follows:

I understand the definition of ordinary care to be that degree of care used by a person or corporation of ordinary prudence under the same or similar circumstances. I understand that proximate cause means that cause which, in a natural and continuous sequence, produces an event and without which cause such an event would not have happened. In order to be a proximate cause, the act or omission complained of must be such that a person or corporation using ordinary care would have foreseen that the event or some similar event, might reasonably result therefrom. There may be more than one proximate cause to an event. Based on those definitions, it is my opinion in reasonable engineering probability that Hyundai Motor Company was negligent in the design of the 1999 Hyundai Sonata by failing to have laminated glass in the side windows ....

(*Id.*, para 8, emphasis added.) It is difficult to conceive of a course of reasoning that better illustrates drawing a legal conclusion than this. The invocation of "reasonable engineering probability," plainly inapplicable here, does nothing to change that fact.<sup>8</sup> Opinions as to such

---

<sup>6</sup>The listing of proffered opinions in his expert reports does not explicitly include legal conclusions, but the other submissions of the parties suggest he may seek to offer such opinions.

<sup>7</sup>Declaration of Stephen A. Batzer, Ph.D., P.E. dated January 11, 2010.

<sup>8</sup>Dr. Batzer, like certain of plaintiff's other experts, occasionally invokes the mantra of "reasonable engineering probability," or some similar formulation, in circumstances where it

legal conclusions will be excluded.

Subject to the indicated limitations, plaintiffs have made a sufficient showing to warrant the admission of Dr. Batzer's testimony as against Daubert concerns.

Donald Friedman

Donald Friedman, the plaintiff's rollover expert, has a B.S. in electrical engineering. He has had extensive experience relating to vehicle design and safety performance, focusing most recently on vehicle crashworthiness in rollover accidents. Since 1985 he has testified in approximately 1000 products liability cases. Friedman Declaration.<sup>9</sup> For the past decade Mr. Friedman has been associated with Xperts, LLC and the Center for Injury Research ("CFIR").<sup>10</sup>

In preparing his testimony in this case Mr. Friedman conducted two different tests — the Jordan Rollover System test and the M-216 test. Based on the test results he intends to offer the opinions that: (1) the roof structure was defectively designed in that the roof crushed more than four inches and struck Ms. Raley's head at a velocity of between seven and ten miles per hour, (2) alternative roof designs were technologically and economically feasible at the time the Raley vehicle was built, (3) the lack of adequate upper interior

---

*has no application or is simply an effort to add rhetorical heft to a challenged opinion. One expert's invocation of "reasonable degree of probability" was particularly meaningless.*

<sup>9</sup>*Declaration of Donald Friedman dated January 11, 2010.*

<sup>10</sup>*The CFIR was a nonprofit organization founded by Mr. Friedman and Dr. Carl Nash in 2000.*

padding facilitated other injuries, (4) as a result of the excessive roof crush the vehicle's side windows broke, allowing Ms. Raley to be ejected, and (5) the rollover accident was reasonably foreseeable. Defendants object to the admission of expert testimony based on either test.

#### Jordan Rollover System

Mr. Friedman developed the Jordan Rollover System ("JRS"), a dynamic rollover test, with Acen Jordan in 2002.<sup>11</sup> "The JRS device rotates a vehicle body structure on a rotating apparatus ('spit') while the road surface platform moves a track underneath the vehicle and contacts the roof structure." Roof Crush Resistance, Final Rule, 74 Fed.Reg. 22348 (May 12, 2009) (codified at 49 C.F.R. pt.57 1,585) ("Final Rule"). The vehicle is dropped to the road bed and "interacts with the road bed on both sides of the roof and the road bed goes past so the vehicle can then rotate to rest independent of any other influence on it." Friedman deposition, p, 82, Doc. #89, Exhibit 2.

Mr. Friedman tested two Hyundai Sonata vehicles using the JRS device – an unmodified 1999 Hyundai Sonata and a 1999 Hyundai Sonata with a reinforced roof.<sup>12</sup> The test was structured to "compare the capacity of an unmodified 1999 Hyundai Sonata's roof to resist excessive crush in a reasonably foreseeable rollover to a reinforced roof's capacity

---

<sup>11</sup>Mr. Friedman testified that the JRS test device became operational in 2004.

<sup>12</sup>Two other JRS tests were performed on a single 1999 Hyundai vehicle, which did not involve crash test dummies. Mr. Friedman does not base his opinions on those tests.



Defendants' principal objections to the JRS test are that it is unreliable and the JRS tests on the Hyundai Sonata were conducted under circumstances that differ greatly from those of the Raley crash. The court finds that concerns about the JRS expressed by the National Highway Traffic Safety Administration ("NHTSA") and other courts, coupled with the lack of correlation between the test parameters and the subject accident, warrant the exclusion of evidence or testimony pertaining to the JRS tests at trial.

In 2009, NHTSA revised the agency's safety standard on roof crush resistance (Federal Motor Vehicle Safety Standard No. 216 ("FMVSS 216")). In the process of amending the rule the agency considered whether it should include some type of dynamic test as part of the roof crush resistance standard. The JRS was among the dynamic tests considered.<sup>15</sup> NHTSA concluded, though, that it could not adopt or propose any dynamic test. 74 Fed 22355. With respect to the JRS test procedure the agency found that, while a number of commentators indicated their support for it and the developers had submitted data for multiple tests, it had "remaining questions regarding the setup, conduct, and evaluation of the JRS test procedure." *Id.* at 22390. NHTSA stated that "[a]fter considering the data submitted, we believe there are a large number of unresolved technical issues related to the JRS with respect to whether it would be suitable as a potential test procedure to replicate real-world crash damage patterns for a safety standard evaluating vehicle roof crush

---

<sup>15</sup>NHTSA representatives met with Xperts, LLC at its test facility to view and discuss the JRS device on February 23, 2007. 74 Fed.Reg. 22355

to resist excessive crush.” Friedman Declaration, p.3.<sup>13</sup> A dummy was used in the test, which measured intrusion and intrusion speed.<sup>14</sup>

The tests were conducted using a protocol consisting of the characteristics “typical of two-roll rollovers.” Friedman depo., p. 8, Doc. #89, Exhibit 3. Friedman testified that the protocol design was not based on the characteristics of the Raley accident. *Id.* at 7. However, he stated in his expert report that “[t]he tests were characterized by the Raley vehicle accident reconstruction developed by Mr. Charles Dickerson, Friedman Supplemental Expert Report, p. 7, and made similar statements during his deposition. While his explanation of what he meant by “characterized” was somewhat confusing, *see* Friedman depo., pp. 7-16, Doc. #89, Exhibit 3, it appears Mr. Friedman concluded, after viewing the animation created by plaintiff’s reconstruction expert, that the generic two-roll criteria used to create the test protocol were consistent with the animation. However, Mr. Friedman acknowledged that the animation did not give specific values of the type used to develop a protocol for a JRS test, *id.* at 16, and that Mr. Dickerson lacked or did not provide him with specific information about the Raley accident, *e.g.*, vehicle speed at roof touchdown, roll rate, etc. *Id.* at 14-15.

---

<sup>13</sup>Under the National Highway Traffic Safety Administration (“NHTSA”) rule pertaining to roof crush resistance that was in effect at the time the subject vehicle was built, FMVSS 216, the roof of a passenger vehicle had to withstand 1.5 times the vehicle’s unloaded weight. In other words, the strength to weight ratio was 1.5. Final Rule. The rule was amended effective July 13, 2009, to double the amount of force the vehicle’s roof structure must withstand to 3.0 times the vehicle’s unloaded weight. *Id.*

<sup>14</sup>It appears from Mr. Friedman’s report that he is, to some extent, reusing opinions from other litigation. *E.g.*, “[T]he roof crush (and post crash negative headroom) ... were the cause of Ms. Raley’s death.” Friedman Supplemental Report, p. 7.

structural integrity.” *Id.* Among its concerns were the test parameters. The agency noted that, while the JRS released the test vehicle from a predetermined top height, the ideal drop height is not known. The test’s used of a predetermined roll rate also was questioned as that “has a role in the duration of the load on the roof and could have a significant effect on the roof performance during the test.” *Id.* The agency also believed there was “a need to correlate these parameters to real world data, which we do not have.” *Id.* Other unresolved issues related to roadway speed and road surface, repeatability, and the test’s failure to take into account the initial lateral acceleration in a real world rollover.

Plaintiff argues that NHTSA’s multiple concerns were due to its lack of data from the JRS tests. Friedman states in his Declaration that he believed “when NHTSA has had an opportunity to complete its review and evaluation of the JRS, NHTSA will determine the JRS is repeatable enough to serve as a compliance test in the place and stead of the current static test of FMVSS 216.” Friedman Declaration, p. 8.

The court recognizes that there is a difference between what NHTSA might require for a test to be part of the federal roof crush standard and what is required for the results of a test procedure to be admissible under Daubert and Fed.R.Evid. 702. However, many of the concerns expressed by NHTSA are pertinent to the court’s inquiry here, including drop height and use of a predetermined roll rate. Arbitrary test parameters were also the basis, in part, for the exclusion of evidence related to the JRS test in Schwab v. Nissan North America, Inc., 502 F.Supp.2d 980 (E.D.Mo. 2007). They preclude its admission here.

The other significant problem with the JRS test, as conducted, is the lack of correlation between the protocol for the JRS tests conducted on the Hyundai Sonata vehicles and the conditions of the Raley accident. Although he stated in both his Expert Report and deposition testimony that the test parameters were “characterized” by the accident, Friedman states in his Declaration that the protocol used had “been determined in independent research to represent most 2 rollover accidents,” but was not intended as a recreation and did not produce a re-creation. Friedman Declaration, p. 21. He also now states, in response to defendants’ motion, that he chose a protocol that “most closely resembled most 2 rollover events based upon parameters determined by independent research which would likely be similar to Ms. Raley’s accident since her event was a two rollover event.” *Id.* at 22.<sup>16</sup> He concludes, based upon the JRS test, that the “1999 Hyundai Sonata’s roof is defectively designed because it was unable to resist excessive roof intrusion and roof intrusion speed as occurs in most two rollover events.” *Id.* at 21. He also declares that “it is clear that the reinforced roof would prevent the type of injuries that Ms. Raley incurred on a first roll in most 2 roll accidents similar to Ms. Raley’s accident, inasmuch as Ms. Raley’s accident, based upon the reconstruction is 2 rollovers.” *Id.* at 23-24.

The question is what relevance does the performance of the roof of a vehicle “when subjected to the forces which are most often encountered in most two rollover events,” *id.*

---

<sup>16</sup>*Friedman appears to have changed his position in reaction to the defendants’ argument that he lacked the necessary information with which to choose a test protocol that would have approximated the conditions of the Raley accident.*

at 23, have to the issue here. Under Friedman's analysis the same test protocol would apply to every accident in which the vehicle rolled twice, even though "[r]ollover crashes are complex and chaotic events," occurring under a wide range of conditions. 74 Fed 22350. The court does not disagree with his conclusion that a test does not have to be "performed under real world rollover conditions" to establish that "a roof can be technologically and economically made stronger." Friedman Declaration, p. 26. The primary issue here, though, is not whether the Hyundai roof could have been made stronger.

The "proposed testimony is [not] sufficiently 'relevant to the task at hand.'" Bitler v. A.O. Smith Corp., 400 F.3d 1227, 1234 (10th Cir. 2004) quoting Daubert v. Merrill Dow Pharm. Inc., 509 U.S. 579 (1993)). There is not an appropriate "fit" between the evidence offered and the material issue to which it is directed.

The court concludes the proffered evidence and testimony regarding the JRS test is neither sufficiently reliable nor relevant. Accordingly, it will not be admitted at trial.<sup>17</sup>

#### —216 Test

The test for determining whether a roof meets the federal standard for roof strength,

---

<sup>17</sup>Plaintiff has proffered several papers regarding the JRS tests, which Mr. Friedman states are peer reviewed, see Friedman Declaration, pp. 14-15, and another peer-reviewed article about the device is scheduled to be published in the International Journal of Crashworthiness in the next several months. However, the court still does not consider the test to be considered generally accepted. It was questioned by NHTSA and has been rejected by several courts. In making its decision, the court has considered both that there is a limited amount of peer-reviewed literature on the JRS, that much of the "peer reviewed" activity related to it appears to be somewhat partisan in nature, and that NHTSA recently expressed multiple reservations about the test.

FMVSS 216, involves placing a large steel test plate, referred to as a platen, in contact with the roof of a vehicle and then pressing it downward to simulate contact of the roof with the ground during a rollover crash. Until NHTSA revised the rule in 2009,<sup>18</sup> the FMVSS 216 test applied the platen to one side of the roof<sup>19</sup> at a 25 degree roll angle and a 5 degree pitch angle when viewed from the side. The regulation required a vehicle's roof to be able to withstand 1.5 times its own weight while crushing less than five inches. Mr. Friedman tested the Hyundai Sonata using a test he developed, the modified 216 or M-216 test.

There are several differences between the federal test and Mr. Friedman's test which, defendants argue, are significant and mandate the exclusion of testimony or evidence pertaining to the results of the M-216 test. These include the platen size (30 inch by 72 inch (FMVSS 216) versus 12 inch by 24 inch (M-216)) and the pitch angle (platen applied to roof at 5 degree pitch angle (FMVSS 216) versus 10 degree pitch angle (M-216)). Defendants claim the differences "skew the results" of the M-216 test, diminishing its reliability and usefulness. They argue that, while the larger platen used in the FMVSS 216 test distributes force across the A, B and C pillars of the automobile frame, the smaller platen concentrates more force on the A pillar.

---

<sup>18</sup>The court will refer to the standard applicable to plaintiff's vehicle – the unrevised version of FMVSS216, as FMVSS 216.

<sup>19</sup>The new FMVSS 216 test applies the platen to both sides of the vehicle and increased the strength-to-weight ratio from 1.5 to 3 on each side of the vehicle.

Mr. Friedman responds<sup>20</sup> that he selected a pitch angle of 10 degrees based on a review of 500 files of government investigations of rollovers involving serious, severe and fatal injuries. He also states in his Declaration that one of the rollover tests performed by Gary Bahling, a defense expert, demonstrates that pitch angles of 10 degrees occur in real world rollovers. Mr. Friedman acknowledged at the Daubert hearing that NHTSA rejected his proposal to reduce the platen size, but testified that the critical factor is the pitch angle.

The court concludes Mr. Friedman's proffered testimony related to the M-216 testing is sufficiently reliable and relevant to be admitted at trial. Several courts, including many of those cited by defendants which had excluded Mr. Friedman's testimony relating to the JRS, have allowed him to testify regarding M-216 testing. As the Supreme Court noted in Daubert, "[v]igorous cross-examination, presentation of contrary evidence and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." Daubert, 509 U.S. at 596. Mr. Friedman will be allowed to offer his opinions based on the M-216 testing.

William H. Muzzy, III

William H. Muzzy, III, plaintiff's seat belt expert. has a B.S. in mechanical engineering. He has spent most of his career researching the effects of impact acceleration on humans and different kinds of occupant restraint systems. He owns MWMuzzy

---

<sup>20</sup>The plaintiff has, in her responses to the various Daubert motions, filed briefs along with the "Declarations" of her experts. The Declarations essentially are responses to defendants' briefs and occasionally attempt to fill in or "explain" gaps in prior testimony.

Consulting, LLC and, since 1991, has been a consultant regarding restraint systems and occupant kinematics.

As summarized in his September 10, 2009, expert report, Mr. Muzzy intends to offer the following opinions: (1) the Raley vehicle went out of control when struck by another vehicle, collided with some sand barrels, left the road and traveled down an embankment rolling twice, (2) neither front air bag deployed, showing that there was insufficient forward deceleration to activate the air bag algorithm, (3) plaintiff was wearing her seat belt, which failed to properly restrain her during the rollover, (4) plaintiff's seat belt buckle unlatched during the rollover sequence allowing her most likely to be ejected through the driver's side window, (5) the two probable scientific explanations for the seat belt buckle unlatching are inadvertent unlatching and inertial unlatching, (6) the 1999 Hyundai Sonata driver's seat belt and buckle were defective due to the design which allowed inertial and/or inadvertent unlatching, (7) alternate safe, effective seat belt buckle designs were available (both technically and economically feasible), (8) the accident and seat belt unlatching under the circumstances of such an accident were foreseeable, and (9) defendants' conduct in designing the seat belt was "intentional and evidenced a reckless disregard and conscious indifference for the lives and safety of others ...." Defendants seek to exclude Mr. Muzzy's testimony, claiming that his inadvertent unlatching theory is based on unscientific ball bearing tests conducted and other unreliable evidence reviewed after his expert report was submitted. They contend his alternate unlatching theory – inertial release – is similarly unsupported and



unreliable.

Mr. Muzzy's proposed testimony was the subject of a Daubert hearing. At the conclusion of that hearing on February 10, 2010, the court announced its decision that Mr. Muzzy's testimony would be allowed to testify regarding his opinions that the seat belt buckle in the Raley vehicle was defective because it inertially unlatched during the accident and that plaintiff was wearing her seat belt when the vehicle rolled. The court concluded any testimony or evidence regarding an inadvertent unlatching of the buckle would not be permitted. Other areas of testimony, such as Mr. Muzzy's opinion that defendants' conduct was intentional and reckless, also were found to be inadmissible. The court explained in detail the reasons for its rulings. They will not be repeated here. The court will note again, though, that a significant factor in the court's analysis was that Mr. Muzzy lacked a thorough and reasoned basis for his opinion that the seat belt buckle inadvertently unlatched at the time he disclosed it in his expert report. *See* February 9, 2010, Orders [Doc. # 192, 193] granting in substantial part defendants' motions to exclude undisclosed expert information.

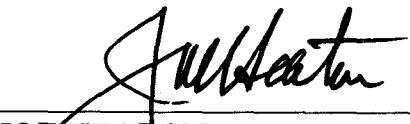
Defendants also challenge Mr. Muzzy's opinion that the subject seat belt was defective because it did not remain on plaintiff's pelvis during the accident. They correctly asserted that that opinion was not disclosed in Mr. Muzzy's expert report. He will not, therefore, be allowed to offer that opinion and plaintiff is precluded from introducing any evidence relating to that asserted defect.

Accordingly, defendants' motions in limine to exclude the expert testimony of

Stephen Batzer, Donald Friedman, and William Muzzy and related evidence [Doc. Nos. 88, 89, 90] are granted in part and denied in part.

**IT IS SO ORDERED.**

Dated this 11 day of *Feb*, 2010.

  
\_\_\_\_\_  
JOE HEATON  
UNITED STATES DISTRICT JUDGE